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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,642	09/05/2003	Robert H. Ashton	US20020383	8104

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WHIRLPOOL PATENTS COMPANY
MD 0750
Suite 102
500 Renaissance Drive
St. Joseph, MI 49085

EXAMINER	
RIGGLEMAN, JASON PAUL	
ART UNIT	PAPER NUMBER
1792	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/656,642	ASHTON ET AL.	
	Examiner	Art Unit	
	JASON P. RIGGLEMAN	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) *5 and 20-26* is/are withdrawn from consideration.

5)☒ Claim(s) *12 and 29* is/are allowed.

6)☒ Claim(s) *1-4, 6-11, 13-19, 27-28, 30-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/23/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/2007 has been entered.

Status of Claims

2. Applicant's reply filed on 12/19/2007 is acknowledged. Current pending claims are 1-39. Claims 1, 12, 27, and 29 are amended. Claims 5 and 20-26 are withdrawn.

Response to Amendments

3. Applicant's amendments, filed 12/19/2007, with respect to the claims have been entered. Also, the applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 6-11, 19 are rejected under 35 U.S.C. 103(a) as obvious over Hoffman (US Patent No. 5320120) in view of Cushing et al. (US Patent No. 4150679).

6. Hoffman discloses a dishwasher having a wash chamber (17), pump (19), spray arm (26), filter chamber in a wall (32), inlet (30), porous filter element (31) which also has the outlet for the fluid to flow back into the wash chamber (col. 3, ll. 65-col. 4, ll. 5). It can be seen that the filter is provided on the exterior surface a wash chamber sidewall – (Note: the liquid flows through the filter element 31 as indicated by the arrow in Fig. 2 – the liquid flows through the filter). The floor of the wash chamber (16) is lower than the filter chamber and therefore is part of the wall region. Hoffman also discloses the spray arm has a nozzle positioned to spray wash liquid on the opening and the filter area is located in the rear of the chamber (Fig. 2, Item 38).

7. Hoffman does not teach that the filter chamber in the plane of the wall with a non-linear portion guiding flowing into the filter; however, Cushing et al. teaches a bypass filter arrangement where the filter is in the "plane" of the sidewall (liquid flows vertically through the holes 38), Fig. 3. The walls have a nonlinear portion (conduit means 70 and open trough 71) for guiding liquid flow into the filter chamber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman with Cushing et al. to create a dishwashing machine which has a bypass filter which has guided flow to the filter achieve the expected result.

8. Hoffman, as modified by Cushing et al., does not teach that the filter chamber is provided on an exterior surface of the sidewall; however, it has been held that an obvious choice in design is not patentable. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Hoffman, as modified by Cushing et al., to modify the filter/conduits of the dishwashing machine create a larger wash chamber to achieve the expected result.

9. Note: it is suggested applicant claim that the filter element is in the plane of a vertical sidewall.

10. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Cushing et al. (US Patent No. 4150679) and Price (2003/0213505).

11. Hoffman discloses a dishwasher having a wash chamber (17), pump (19), spray arm (26), filter chamber in a wall (32), inlet (30), porous filter element (31) which also has the outlet for the fluid to flow back into the wash chamber (col. 3, ll. 65-col. 4, ll. 5). It can be seen that the filter is provided on the exterior surface a wash chamber sidewall – (Note: the liquid flows through the filter element 31 as indicated by the arrow in Fig. 2 – the liquid flows through the filter). The floor of the wash chamber (16) is lower than the filter chamber and therefore is part of the wall region. Hoffman also discloses the spray arm has a nozzle positioned to spray wash liquid on the opening and the filter area is located in the rear of the chamber (Fig. 2, Item 38).

12. Hoffman does not teach that the filter chamber in the plane of the wall with a non-linear portion guiding flowing into the filter; however, Cushing et al. teaches a bypass filter arrangement where the filter is in the "plane" of the sidewall (liquid flows vertically through the holes 38), Fig. 3. The walls have a nonlinear portion (conduit means 70 and open trough 71) for guiding liquid flow into the filter chamber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman

with Cushing et al. to create a dishwashing machine which has a bypass filter which has guided flow to the filter achieve the expected result.

13. Hoffman, as modified by Cushing et al., does not teach that the filter chamber is provided on an exterior surface of the sidewall; however, it has been held that an obvious choice in design is not patentable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman, as modified by Cushing et al., to modify the filter/conduits of the dishwashing machine create a larger wash chamber to achieve the expected result.

14. Hoffman, as modified by Cushing et al., does not specifically disclose the wall portion curving inwardly but does disclose gathering surfaces. Price discloses the walls to the chamber curving inwardly. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Hoffman, as modified by Cushing et al., with Price for the benefit of concealing the filtered material.

15. Claims 16, 17, 27, 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Cushing et al. and the Applicants specification.

16. Hoffman discloses a dishwasher having a wash chamber (17), pump (19), spray arm (26), filter chamber in a wall (32), inlet (30), porous filter element (31) which also has the outlet for the fluid to flow back into the wash chamber (col. 3, ll. 65-col. 4, ll. 5). It can be seen that the filter is provided on the exterior surface a wash chamber sidewall – (Note: the liquid flows through the filter element 31 as indicated by the arrow in Fig. 2 – the liquid flows through the filter). The floor of the wash chamber (16) is lower than the filter chamber and therefore is part of the wall region. Hoffman also discloses the

spray arm has a nozzle positioned to spray wash liquid on the opening and the filter area is located in the rear of the chamber (Fig. 2, Item 38).

17. Hoffman does not teach that the filter chamber in the plane of the wall with a non-linear portion guiding flowing into the filter; however, Cushing et al. teaches a bypass filter arrangement where the filter is in the "plane" of the sidewall (liquid flows vertically through the holes 38), Fig. 3. The walls have a nonlinear portion (conduit means 70 and open trough 71) for guiding liquid flow into the filter chamber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman with Cushing et al. to create a dishwashing machine which has a bypass filter which has guided flow to the filter achieve the expected result.

18. Hoffman, as modified by Cushing et al., does not teach that the filter chamber is provided on an exterior surface of the sidewall; however, it has been held that an obvious choice in design is not patentable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman, as modified by Cushing et al., to modify the filter/conduits of the dishwashing machine create a larger wash chamber to achieve the expected result.

19. Hoffman, as modified by Cushing et al., does not teach a sump screen, strainer or sensors detecting the liquid level of the filter chamber. Applicant's specification describes a "…screen can have a removable strainer… as is well known in the art." (Paragraph 26) The specification also describes, "[liquid level] sensors 107, 107' can be optical sensors, turbidity sensors or pressure sensors as are well known in the art… US Patent 6909743 and US Patent 6103017, each incorporated by reference, disclose

the use of pressure sensors to automatically initiate a filter purge cycle in dishwashers." (Paragraph 36) Sump screens are also well known in the art and would be within the level of one of ordinary skill to foresee their use in Hoffman, as modified by Cushing et al.,. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Hoffman, as modified by Cushing et al., with a strainer and filter level indicating means (and spray nozzles in the wash chamber/filter chamber), as they are known improvements and accessories to dishwashers.

20. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Cushing et al. and Sargeant (US Patent No. 5743281).

21. Hoffman discloses a dishwasher having a wash chamber (17), pump (19), spray arm (26), filter chamber in a wall (32), inlet (30), porous filter element (31) which also has the outlet for the fluid to flow back into the wash chamber (col. 3, ll. 65-col. 4, ll. 5). It can be seen that the filter is provided on the exterior surface a wash chamber sidewall – (Note: the liquid flows through the filter element 31 as indicated by the arrow in Fig. 2 – the liquid flows through the filter). The floor of the wash chamber (16) is lower than the filter chamber and therefore is part of the wall region. Hoffman also discloses the spray arm has a nozzle positioned to spray wash liquid on the opening and the filter area is located in the rear of the chamber (Fig. 2, Item 38).

22. Hoffman does not teach that the filter chamber in the plane of the wall with a non-linear portion guiding flowing into the filter; however, Cushing et al. teaches a bypass filter arrangement where the filter is in the "plane" of the sidewall (liquid flows vertically through the holes 38), Fig. 3. The walls have a nonlinear portion (conduit means 70

and open trough 71) for guiding liquid flow into the filter chamber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman with Cushing et al. to create a dishwashing machine which has a bypass filter which has guided flow to the filter achieve the expected result.

23. Hoffman, as modified by Cushing et al., does not teach that the filter chamber is provided on an exterior surface of the sidewall; however, it has been held that an obvious choice in design is not patentable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman, as modified by Cushing et al., to modify the filter/conduits of the dishwashing machine create a larger wash chamber to achieve the expected result.

24. Hoffman, as modified by Cushing et al., does not specifically disclose the dishwasher is a drawer type. Sargeant discloses dishwashers of a drawer type. Both of these types of dishwashers are common and one of ordinary skill would immediately foresee that the structure shown by Hoffman, as modified by Cushing et al., could be incorporated into a drawer type of dishwasher. At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Hoffman, as modified by Cushing et al.'s filtering and dishwashing structure with a Sergeant drawer type of dishwasher as they are very common and because of the additional convenience that these dishwashers provide.

25. Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Cushing et al., and Applicant's specification, as applied to claims 17, 27, 28, 31-39 above, and further in view of Thies (US Patent No. 5,909,743).

26. Hoffman, as modified by Cushing et al., and Applicant's specification disclose the dishwasher shown above in the 103 rejection. They do not specifically disclose a pump for the filter chamber. Thies discloses a pump for the filter chamber (54) along with a pump for draining the washing chamber (34). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Hoffman, as modified by Cushing et al., and Applicant's spec. with the pump arrangement shown by Thies for the benefit of a flow control of the filtered material.

27. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Cushing et al. and Thies (US Patent No. 5,909,743).

28. Hoffman discloses a dishwasher having a wash chamber (17), pump (19), spray arm (26), filter chamber in a wall (32), inlet (30), porous filter element (31) which also has the outlet for the fluid to flow back into the wash chamber (col. 3, ll. 65-col. 4, ll. 5). It can be seen that the filter is provided on the exterior surface a wash chamber sidewall – (Note: the liquid flows through the filter element 31 as indicated by the arrow in Fig. 2 – the liquid flows through the filter). The floor of the wash chamber (16) is lower than the filter chamber and therefore is part of the wall region. Hoffman also discloses the spray arm has a nozzle positioned to spray wash liquid on the opening and the filter area is located in the rear of the chamber (Fig. 2, Item 38).

29. Hoffman does not teach that the filter chamber in the plane of the wall with a non-linear portion guiding flowing into the filter; however, Cushing et al. teaches a bypass filter arrangement where the filter is in the "plane" of the sidewall (liquid flows vertically through the holes 38), Fig. 3. The walls have a nonlinear portion (conduit means 70

and open trough 71) for guiding liquid flow into the filter chamber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman with Cushing et al. to create a dishwashing machine which has a bypass filter which has guided flow to the filter achieve the expected result.

30. Hoffman, as modified by Cushing et al., does not teach that the filter chamber is provided on an exterior surface of the sidewall; however, it has been held that an obvious choice in design is not patentable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hoffman, as modified by Cushing et al., to modify the filter/conduits of the dishwashing machine create a larger wash chamber to achieve the expected result.

31. Hoffman, as modified by Cushing et al., also discloses a pump, which draws water from the wash chamber to drain (41). Hoffman, as modified by Cushing et al., does not specifically disclose a pump for the filter chamber. Thies discloses a pump for the filter chamber (54) along with a pump for draining the washing chamber (34). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Hoffman, as modified by Cushing et al., with the pump arrangement shown by Thies for the benefit of a flow control of the filtered material.

Allowable Subject Matter

32. Claims 12 and 29 are allowed.

33. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach, suggest or disclose the filtering system in the wall of the dishwasher connected with a selector valve having a first inlet connected to the

filter drain and a second inlet connected to the wash chamber drain, an outlet connected to the pump, and one or more valve elements and actuators for selectively closing and opening the inlets.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alabaster (US Patent No. 3122148) teaches a dishwashing machine having a filter, which filters liquid flowing down the sidewall, in the side of the wash chamber which is backwashed by the spray arm. Miyazaki et al. (JP4200429) teaches a filter chamber in an exterior portion of a sidewall of a dishwashing machine. Jerg (US2004/0050774) teaches flap-like curved filters. Cushing et al. (US Patent NO. 4150679) and Dickens Jr., et al. (US Patent No. 4210285) teach a filter chamber at the sidewall.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason P Riggleman/
Examiner
Art Unit 1792

/Alexander Markoff/
Primary Examiner, Art Unit 1792